GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS

LOK SABHA UNSTARRED QUESTION NO. 678 TO BE ANSWERED ON 26TH JUNE, 2019

RADIATION NORMS FOR MOBILE TOWERS

678. SHRIMATI RATHVA GITABEN VAJESINGBHAI:

Will the Minister of COMMUNICATIONS be pleased to state:

(a) the number of mobile towers in the country, State/UT-wise and the radiation norms for the same;

(b) whether cases of violation of the said norms by Telecom Service Providers (TSPs) have come to the notice of the Government and if so, the details thereof during each of the last three years and the current year, State/UT-wise along with the amount of penalty imposed on them, TSP-wise;

(c) whether the Government has doubled the penalty for violation of such norms in recent past and if so, the details thereof; and

(d) the other corrective steps taken by the Government to keep a check on the erring TSPs?

ANSWER

MINISTER OF COMMUNICATIONS, LAW & JUSTICE AND ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI RAVI SHANKAR PRASAD)

(a) Licensed Service Area wise (LSA-wise) details of number of mobile towers is provided at **Annexure-I.** The present EMF emission norms as laid down for BTSs installed at various mobile towers in India are as follows:

| Frequency Range | E-Field | Strength | H-Field | Strength | Power | Density |
|---------------------|-------------------------|----------|----------------------------------|----------|-----------------|---------|
| | (Volt/Meter) | | (Amp/Meter) | | (Watt/Sq.Meter) | |
| | | | | | | |
| 400 MHz to 2000 MHz | $0.434 f^{\frac{1}{2}}$ | | $0.0011 \text{ f}^{\frac{1}{2}}$ | | f / 2000 | |
| | | | | | | |
| 2 GHz to 300 GHz | 19.29 | | 0.05 | | 1 | |
| | | | | | | |

(f is frequency in MHz)

Contd...2/-

(b) The Licensed Service Area wise (LSA-wise) details of number of Base Transceiver Stations (BTSs) found exceeding the prescribed EMF radiation limits on actual testing during each of the last three years and the current year is provided at Annexure-II. Telecom Service Provider (TSP) wise details of penalty imposed on BTSs found exceeding the prescribed EMF radiation limits on actual testing during each of the last three years and the current year is provided at Annexure-III.

(c) On 20.11.2013, the penalty has been increased from Rs. 5 lakh per BTS to Rs 10 lakh per BTS per incidence in case of non-compliance to actual EMF norms. Further, on 29.03.2019, in case of a shared site, a penalty of Rs 20 lakh per BTS per incidence has been prescribed to be imposed on rogue BTS(s) (BTS whose exposure ratio/index is more than '1') if the site becomes compliant removing contribution of that rogue BTS(s). However, if the site is not compliant even after removing the contribution of that rogue BTS (s), then a penalty in proportion to the exposure ratio (Rs. 20 lakh x Exposure Ratio) is prescribed to be imposed on all the remaining participating BTSs.

(d) In addition to levy of financial penalty as mentioned above, if the BTS is not made compliant to the EMF radiation norms within 30 days by the erring TSP, the same is required to be shut down as per prescribed procedure.

LICENSED SERVICE AREA WISE (LSA-WISE) DETAILS OF NUMBER OF MOBILE TOWERS:

| SN | LSA | NUMBER OF MOBILE TOWERS | | | |
|----|------------------|----------------------------|--|--|--|
| 1 | Andhra Pradesh | 43237 | | | |
| 2 | Assam | 12657 | | | |
| 3 | Bihar | 39254 | | | |
| 4 | Delhi | 26461 | | | |
| 5 | Gujarat | 33212 | | | |
| 6 | Himachal Pradesh | 6739 | | | |
| 7 | Haryana | 12747 | | | |
| 8 | Jammu & Kashmir | 9489 | | | |
| 9 | Karnataka | 35804 | | | |
| 10 | Kolkata | 12966 | | | |
| 11 | Kerala | 17360 | | | |
| 12 | Mumbai | 16421 | | | |
| 13 | Maharashtra | 42436 | | | |
| 14 | Madhya Pradesh | 41295 | | | |
| 15 | North East | 8111 | | | |
| 16 | Odisha | 17834 | | | |
| 17 | Punjab | 20243 | | | |
| 18 | Rajasthan | 30159 | | | |
| 19 | Tamilnadu | 42977 | | | |
| 20 | UP(East) | 33603 | | | |
| 21 | UP(West) | 28974 | | | |
| 22 | West Bengal | 22280 | | | |
| | Grand Total | 554259 | | | |

LICENSED SERVICE AREA WISE (LSA-WISE) DETAILS OF NUMBER OF BASE TRANSCEIVER STATIONS (BTSs) FOUND EXCEEDING THE PRESCRIBED EMF RADIATION LIMITS ON ACTUAL TESTING DURING EACH OF THE LAST THREE YEARS AND THE CURRENT YEAR:

| S.No. | Name of LSA | 2016-17 | 2017-18 | 2018-19 | 2019-20 (till april 30.4.2019) |
|-------|------------------|---------|---------|---------|-----------------------------------|
| 1 | Andhra Pradesh | 0 | 0 | 0 | 0 |
| 2 | Assam | 0 | 0 | 0 | 0 |
| 3 | Bihar | 0 | 0 | 0 | 0 |
| 4 | Delhi | 0 | 0 | 0 | 0 |
| 5 | Gujarat | 0 | 0 | 0 | 0 |
| 6 | Haryana | 0 | 0 | 0 | 0 |
| 7 | Himachal Pradesh | 0 | 0 | 0 | 0 |
| 8 | Jammu & Kashmir | 0 | 0 | 9 | 0 |
| 9 | Karnataka | 29 | 42 | 20 | 0 |
| 10 | Kerala | 0 | 0 | 0 | 0 |
| 11 | Kolkata | 0 | 0 | 0 | 0 |
| 12 | Madhya Pradesh | 0 | 0 | 0 | 0 |
| 13 | Maharashtra | 10 | 0 | 0 | 0 |
| 14 | Mumbai | 0 | 0 | 0 | 0 |
| 15 | North East | 0 | 8 | 0 | 0 |
| 16 | Odisha | 0 | 0 | 0 | 0 |
| 17 | Punjab | 0 | 0 | 0 | 0 |
| 18 | Rajasthan | 0 | 0 | 0 | 0 |
| 19 | Tamil Nadu | 0 | 3 | 27 | 0 |
| 20 | UP(East) | 0 | 0 | 0 | 0 |
| 21 | UP West | 0 | 0 | 0 | 0 |
| 22 | West Bengal | 0 | 7 | 0 | 0 |
| | Total | 39 | 60 | 56 | 0 |

TELECOM SERVICE PROVIDER (TSP) WISE DETAILS OF PENALTY IMPOSED ON BTSs FOUND EXCEEDING THE PRESCRIBED EMF RADIATION LIMITS ON ACTUAL TESTING DURING EACH OF THE LAST THREE YEARS AND THE CURRENT YEAR:

| | 2016-17 | | 2017-18 | | 2018-19 | | 01.04.2019 to 30.04.2019 | |
|------------------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|--------------------------|--------------------|
| TSP Name | NC BTS Count | Penalty Imposed | NC BTS Count | Penalty Imposed | NC BTS Count | Penalty Imposed | NC BTS Count | Penalty Imposed |
| Aircel/Dishnet | 1 | 0 | 4 | 2042463 | 2 | 4000000 | 0 | 0 |
| Airtel/BHL | 14 | 0 | 17 | 5013959 | 23 | 32000000 | 0 | 0 |
| BSNL | 2 | 0 | 0 | 0 | 0 | 2000000 | 0 | 0 |
| Idea/ABTL | 1 | 0 | 7 | 2000000 | 7 | 9000000 | 0 | 0 |
| Loop | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MTNL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reliance | 1 | 0 | 2 | 0 | 0 | 3000000 | 0 | 0 |
| Reliance Jio | 5 | 0 | 5 | 0 | 12 | 1000000 | 0 | 0 |
| SSTL (MTS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TTSL/TTML/Tata | 2 | 0 | 7 | 1000000 | 0 | 8000000 | 0 | 0 |
| Telenor/Telewings/ Uninor | 1 | 0 | 0 | 0 | 0 | 3000000 | 0 | 0 |
| Videocon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vodafone | 12 | 0 | 18 | 5000000 | 12 | 28000000 | 0 | 0 |
| Grand Total | 39 | 0 | 60 | 15056422 | 56 | 99000000 | 0 | 0 |

NC – Non Compliant.

NOTE: The process of the imposition of penalty for the non-compliant BTSs found in a particular financial year may be carried out in the subsequent financial years.
